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REMARKS

Claims 1-26 are pending in this application. By this Amendment, Applicants AMEND claims 15 and 19 and ADD claims 21-26.

Claims 15 and 19 were objected to under 37 CFR 1.75 as being duplicates of claims 14 and 18, respectively. Applicants have amended claims 15 and 19 to correct the minor informalities noted by the Examiner. Accordingly, Applicants respectfully request reconsideration and withdrawal of the objection to claims 15 and 19 under 37 CFR 1.75.

Claims 1-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hirano et al. (U.S. 5,550,068) in view of Applicants' Admitted Prior Art (AAPA), **Figs. 1A-1D** and **2**. Applicants respectfully traverse the rejection of claims 1-20.

Claim 1 recites:

"A method of wiring formation comprising the steps of:

forming a feeder film partially on a substrate;

forming on the substrate a plating base film such that the plating base film partially overlaps the feeder film;

forming a plated wiring on the plating base film; and

selectively removing at least a portion of the feeder film that is exposed from the plated wiring." (emphasis added)

Claim 13 recites:

"A method of manufacturing an electronic component comprising the steps of:

providing a substrate:

forming a feeder film partially on the substrate;

forming on the substrate a plating base film by using a physical film making process such that the plating base film partially overlaps the feeder film;

forming a plated wiring on the plating base film using an electrolytic plating process; and

selectively removing at least a portion of the feeder film that is exposed from the plated wiring, using a wet etching process." (emphasis added)

Applicants' claim 1 recites the step of "selectively removing at least a portion of



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the feeder film that is exposed from the plated wiring." Claim 7 recites a similar feature as claim 1. Applicants' claim 13 recites the step of "selectively removing at least a portion of the feeder film that is exposed from the plated wiring, using a wet etching process." Claim 17 recites a similar feature as claim 13. With the improved features of claim 1, 7, 13, and 17, Applicants have been able to provide a method of wiring formation wherein fine wiring is accurately formed (see, for example, the second paragraph on page 2 of the Specification).

Applicants agree with the Examiner that Hirano et al. does not teach or suggest the step of removing the feeder film 2 as recited in Applicants' claims 1, 7, 13, and 17. Applicants also agree with the Examiner that Hirano et al. does not teach or suggest the use of wet etching recited in Applicants' claims 13 and 17. The Examiner has relied upon AAPA to cure these deficiency in Hirano et al.

The Examiner is reminded that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 220 USPQ 303 (Fed. Cir. 1983). Hirano et al. clearly fails to teach the step of "selectively removing at least a portion of the feeder film that is exposed from the plated wiring" recited in Applicants' claims 1, 7, 13, and 17. Hirano et al. teaches the use of insulation member 10 for insulating circuit means 15A from circuit means 15B which negates the need for removing the feeder film 2. Thus, there would have been absolutely no reason or motivation to remove the feeder film of Hirano et al. as alleged by the Examiner because the circuit means 15A is insulated from circuit means 15B by insulating member 10. The Examiner is reminded that prior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings. In re. Sernaker, 217 USPQ 1 (Fed. Cir. 1983).

In addition, Hirano et al. teaches that circuit means **15A** and **15B** have a "narrow and deep cross sectional shape" (lines 27 and 28 of column 8). The Examiner has completely failed to address the effects that removing the feeder film **2**, as recited in



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Applicants' claims 1, 7, 13, and 17, would have on the "narrow and deep" circuit means 15A and 15B.

The Examiner has alleged that "it would have been obvious to one of ordinary skill in the art at the time of the invention was made to remove this feeder film at least partially to disconnect from the main feeder line." However, as noted above, Hirano et al.'s use of insulation member 10 negates the need for removing the feeder film 2. The Examiner has completely failed to properly explain why one of ordinary skill in the art would have been motivated to add the step of removal (or partial removal) of the feeder film to the method of Hirano et al.

The Examiner is reminded that it is error to find obviousness where references diverge and teach away from the invention at hand. W.L. Gore & Assoc. v. Garlock Inc., 220 USPQ 303, 311 (Fed. Cir. 1983). Hirano et al. clearly teaches away from using a wet etching step as recited in Applicants' claims 13 and 17. Hirano et al. states in the second full paragraph of column 13 that "sidewall plating technique demands a deposition masking to form a deep cavity of well defined profile ... cannot be produced by the known wet processing." Thus, the Examiner clearly erred in modifying Hirano et al. to include a step of wet etching as recited in Applicants' claims 13 and 17.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 7, 13, and 17 under 35 U.S.C. §103(a) as being unpatentable over Hirano et al. in view of AAPA.

Accordingly, Applicants respectfully submit that Hirano et al. and AAPA, applied alone or in combination, fail to teach or suggest the unique combination and arrangement of method steps recited in claims 1, 7, 13, and 17 of the present application. Claims 2-6, 21, 25, and 26 depend upon claim 1, and are therefore allowable for at least the reasons that claim 1 is allowable. Claims 8-12 and 22 depend upon claim 7, and are therefore allowable for at least the reasons that claim 7 is allowable. Claims 14-16 and 23 depend upon claim 13, and are therefore allowable for at least the reasons that claim 13 is allowable. Claims 18-20 and 24 depend upon claim



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17, and are therefore allowable for at least the reasons that claim 17 is allowable.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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